

t19_xtuple_0
(TMdr8hkm3qsHfbQ7k5YVYnEnazo5RoSJsNx)

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Let $k6_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k11_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k6_xtuple_0 X0 X1 X2 X3 = k4_tarski (k3_xtuple_0 X0 X1 X2) X3 \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3_xtuple_0 X0 X1 X2 = k4_tarski (k4_tarski X0 X1) X2 \quad (2)$$

Assume the following.

$$\forall X0.k13_xtuple_0 X0 = k9_xtuple_0 (k11_xtuple_0 X0) \quad (3)$$

Assume the following.

$$\forall X0.k11_xtuple_0 X0 = k9_xtuple_0 (k9_xtuple_0 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k9_xtuple_0 X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.k4_tarski X2 X3 \in X0)) \quad (5)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(k6_xtuple_0 X0 X1 X2 X3 \in X4) \Rightarrow (X0 \in k13_xtuple_0 X4)$$